SEMP PERFORMANCE MEASURES & BEST PRACTICES WORKSHOP NEW ORLEANS - OCTOBER 27, 1999 - AIRPORT HILTON HOUSTON - OCTOBER 29, 1999 - AIRPORT MARRIOTT

AGENDA

1.	Continental Breakfa	ast and Registration			7:00 AM
2.	Introduction, Agend	da, & Performance Measure	s History	Peter Velez (Shell)	8:00 AM
3.	Workshop Objectiv	es & MMS Remarks		Chris Oynes (MMS)	8:15 AM
4.	USCG Remarks		Capt. Peter	Richardson (USCG)	8:30 AM
5.	Production Person	nel Safety Pacesetters			8:45 AM
	Facilitators: Panel Members:	Don Howard (MMS) & Kei A) Jack Calhoun (OXY) < B) Joe Sawyer (Mobil) > 3 C) Chip Hoiseth (Grasso	: 30 MMBOE 30 MMBOE		
BRE	AK				10:20 AM
6.	Drilling Contractor	Safety Pacesetter			10:40 AM
	Facilitator: Presenters:	Ray Beittel (MMS) & Lloye Doug Entrekin & Lewis Se			
LUN	СН				11:30 AM
7.	Pollution Prevention	on – Oil Spill and NPDES Pa	acesetters		12:30 PM
	Facilitators: Panel Members:	Capt. Peter Richardson (I A) Andy Pettit/Rick Sisk (B) Bill Anderson (Hess)	(Spirit Energy	y 76) > 30 MMBOE	d)
8.	INC Best Practices	s – How to Prepare for an IN	NC-Free MM	S Inspection	1:30 PM
	Facilitators: Panel Members:	Joe Gordon (MMS) & Ma A) Jack Leezy (MMS) - D B) Tom Basey (MMS) - P	rilling	nevron)	
9.	SEMP Audit Proto	ocols		hon (Kerr-McGee) hn Feducia (MMS)	2:40 PM
10.	Q&A's, Workshop	Feedback, & Concluding R	emarks	Chris Oynes (MMS	3:00 PM
ADJ	IOURN				3:30 PM

BD919201.DOC

Oxy's Operations

27 Platforms / 22 Operating Sites

17 Manned Platforms / 13 Manned Sites

~110 Producing Wells

• 96 Full Time Work Force

~55% Company Personnel

Oxy's Work Priorities

- Safety Performance
- Environmental & Regulatory Compliance
- Production Enhancement
- Cost Effectiveness
- Enhancement and Documentation through SEMP

Personnel Safety Performance

- Production
- 850,000 + W/O LTA
- Construction Including drilling and workover

• Culture

Production Safety

- Awareness
- Training
- Meetings
- Performance Incentives
- Work Force Experiences
- Management's Expectations and Involvement
- Responsible Parties
- Facilitators / Champions

Awareness What Can Happen?

- Actual Incidents & Near Miss Distribution
- MMS Flyers
- Industry Flyers
- Internal Flyers
- Personal Experiences
- Hearsay

Computer Based Training

- H2S
- Hazard Communication
- Hearing Conservation
- · Lockout/Tagout
- Electrical Safety
- Emergency Preparedeness and Response
- Personal Protective Equipment

Computer Based Training

Easy Installation & Test Result Monitoring

Test Out Option (For Most)

Optimum Learning Environment

Very Cost Effective

• Crews Prefer It

Supplemental Training

- 1st Aid/CPR 2 Year Frequency
- Crane Training 4 Year Frequency
- Hands On Fire Extinguisher Annually
- Fall Protection 5 Year Frequency

Meetings

- Crews
- Weekly Platform Safety Meetings
- Work Permit Safety Meetings
- Annual Contractor Meeting
- Contractors used in the last year
- With Contractor Representatives
- Quarterly @ the Major Shorebases Operators & Management
- Safety, Environmental & Operations Issues

Company Personnel Incentives

- Individual Performance Annual
- Bonus on Contiguous Year w/o Recordable
- Cap (10 Contiguous Years)
- Platform Team Performance Annual
- Both Crews Comprise Team
- Team Member w/o Team Recordable
- Supervisor Team Performance Annual
- Both Supervisors + Company Direct Reports
- Supervisor w/o Team Recordable

Full Time Contract Incentives

- Full time is a contractor on location as a regular assignment
- Individual Performance Annual
- Per Person w/o Recordable
- Most of Our Full Time Contractors Annually Give
- Per Person w/o Recordable

Incentive Program Choices

- Wal-Mart Gift Certificates
- One Size Fits All
- Easy & Low Overhead
- Employee's Preferred Choice
- Company Jacket
- Company Coveralls
- Write & Distribute the Program Rules

Work Force Experiences

• Average 15+ Years/Person

Management's Expectations

- Zero Incidents
- Think First Act Second
- Planning
- Overall Lowest Cost

Who is Responsible?

Individual Crew Members

Platform Supervisors

Production Supervisors

Operational Supervisor

Facilitators / Champions?

- Production Supervisors
- Operational Supervisor
- **HES Advisor**
- Platform Supervisors
- Individual Crew Members

Construction

• Painting

• Maintenance Welding

• Piping & Vessel Replacement

Construction Safety

- Crew Size
- Contractor Selection Process
- Platform Supervision
- Repeat Business based on Performance

Selection Process

- Overall Cost Review
- Rate
- Historical Work Quality, Productivity & Overall Cost
- Historical Safety Performance
- Performance on OXY Locations
- Industry Performance
- Desired Product & Performance
- Safe, Productive, Quality & Cost Effective

Crew Size

- Painting: 4 Man Crew
- Welding: 2 to 8 Man Crew / Prefer 4 Man
- Working Supervisor Safety / Dollars
- Company Supervisor: Platform Supervisor

Contractor Safety Program

Contractor Safety Program

<u>Purpose</u>

To select and retain cost effective contractors that have demonstrated and maintain acceptable safety performance.

Safety Program Elements and Requirements

- "New" contractors will complete a "Safety Indicators Request" form which will be reviewed for acceptable performance prior to being awarded a contract.
- Existing contractors safety performance on Company locations will be informally reviewed for acceptable performance and future business utilizing daily observation and information (morning reports, verbal information and feedback, incident reports, incident rate etc.).
- Company's safety expectations will be communicated at Company's annual significant contractor safety meeting.
- Contractors will be included in Company's safety meetings as appropriate.
- Company will have full time contractor awards and/or incentive programs.
- Company will consider and implement part time contractor awards and/or incentive programs when practical, appropriate and/or necessary.
- Written safety training requirements (Company's contractor handbook) will be communicated to contractors.
- Contractor will conduct accident investigations as requested and provide written reports including recommendations to prevent reoccurrence for accidents occurring on Company locations.
- Contractor will provide Company with a copy of contractor's injury or incident reports including reports made to government or regulatory authorities for accidents occurring on Company locations.
- Contractor pre-job and/or daily tailgate safety will be held as appropriate or necessary.

 Safety assessments of contractor operations will be performed on a selected basis as appropriate.

Recognize and Reward

- Company will attempt to formally and/or informally recognize and/or reward superior contractor safety performance when associated with superior overall contractor performance.
- Company will attempt to formally or/or informally recognize and/or reward superior contract personnel safety performance when associated with superior overall contract personnel performance.

Safety Indicator Request Form

The "Safety Indicators Request" form includes an indication of how contractor's insurance company has rated its losses based on the workers compensation experience modifier rate (EMR). Rates below 1.00 indicate the insurance carrier considers the contractor to be a below average risk for their type work.

Post-Well Safety Evaluation

The "Post-Well Safety Evaluation" provides a method of assessing the safety performance of a site-specific operation and proves a "snapshot" of the work as it was actually performed. The evaluation is conducted by a Company representative and is based on the level of compliance observed as compared to the written criteria. This is a weighted-average method which quantifies assigned numerical values and develops a score based on safety expectations. The criteria are ranked relative to their safety importance. A ratio is then calculated which provides a relative numerical percentage ranking. This evaluation may then be considered when awarding future drilling or well servicing contracts rigs/crews. Also, this information should be discussed with the contractor's representative as a method to communicate safety expectations and improve safety performance.

Any Corporate Procedures regarding contractors should be reviewed with this document.

Attachments:

- Comparing and Selecting Safe Contractors
- Safety Indicators Request Form
- Post-Well Safety Evaluation Form

Comparing and Selecting Safe Contractors

One way to determine the difference between contractors regarding safety values is to use indicators that resulted from research performed by Stanford University, Dept. of Civil Engineering, for the Business Roundtable Construction Industry. The three indicators, listed in order of importance, are:

- 1) PAST SAFETY RECORD. Examine the contractor's workers' compensation and OSHA experience. Worker's compensation experience is reflected in the experience modification rate (EMR), Which is the ration of actual losses to expected losses over a three-year period. It reflects the average loss experience for the previous three years and is a good indicator of a contractor's past safety performance and for comparing contractors who perform similar work.
 - a) <u>Experience Modification Rate</u> EMR = <u>Actual Losses</u> Expected Losses

EMR for construction contractors ranges from 0.3 to 2.0. It is not uncommon for contractors in the same industry to have significantly different EMRs.

b) <u>OSHA Incidence Rate</u>. Two OSHA incidence rates can be calculated from data furnished by the bidder.

The first relates to frequency:

No. of Injuries and Illnesses x 200,000

Total Hours Worked by All Employees During Period Covered

An OSHA severity rate can be calculated as follows:

No. of Lost Work Days x 200,000

Total Hours Worked by All Employees During Period Covered

- 2) MANAGEMENT SAFETY ACCOUNTABILITY. Accountability is a key element in managing a safety program. If managers cannot "get in trouble" for poor safety performance, the program will likely fall. Individual performance is a key element in a successful management program. The Business Roundtable suggested evaluating performance based on the following information:
 - a) The recipients of accident reports and frequency distribution of reports (field superintendent, vice president of construction, firm president).
 - b) Frequency of safety meeting for field supervisors.
 - c) Frequency of project safety inspections and the degree to which they include project and field superintendents.
 - d) Compilation method for accident records and the frequency of reporting. Those contractors that subtotal accidents by superintendent and foreman, rather than by company, have a more detailed accountability system.
 - e) Compilation method for accident costs and the frequency of reporting.

 Again, greater accountability comes from a more detailed system that measures project accident costs of superintendents and foremen.
- 3) FORMAL SAFETY PROGRAM. Components of a contractor's safety program found to be associated with better safety performance are:
 - a) Orientation of new workers and foreman
 - b) Frequency of toolbox meetings
 - c) Existence of a written safety program

Safety Indicators Request Form

Company USA Inc. places a high-level of importance on safety for our employees, contractors and the public. We believe a review of your safety record, management accountability and safety program will provide key indicators to use in our contractor selection process as well as how we may work as a Team to achieve our safety expectations. The attached "Safety Guidelines for Contractors" is available for your employees prior to performing work for Company USA Inc. Thank you!

PART "A": Your Safety Record

1.	Company Name:		_ Phone:	()	Date:
	Address:				
	City:	State	:	Zip:	
	# of Employees: Safety Co	ntact Nam	e:		····
	Please list the geographic area this i	nformatio	n covers.	(ex. Offshore	e, entire Company, etc)
2.	Workers Compensation Insurance (Company _			
	Agent: Cit	y:		Sate:	Phone: ()
	Experience Modifier Rate (EMR) - (Most curre	nt and tw	o previous p	eriods)
	Current Previous (1)	Prev	rious (2)_		
	Note: If EMR is 1.0 was it because an EMR?		-	_	r too new) to calculate
	Standard Industrial Classification (
	Industry Classification: (Type of Bu	SIIIESS <i> </i>			
3.	Injuries/Illnesses/Lost-Work Days	: (Current	: Year-to-	date plus two	previous years)
	YEAR	19(YTD)	19	19
Nu	mber of Employees				
	urs Worked				
	juries/Illnesses				
	st-Work-Days				
	iculate Incident Rate (IR)				
	Iculate Severity Rate (SR)				
OS	SHA citations, if any				
	you need assistance in calculatin questing the information.	g rates,	please co	ntact the Co	ompany representative
IR	# of Injuries/Illnesses X 200,00 = Hours Worked	00	SR=		rk Days X 200,000 rs Worked

PART "B": Management Accountability

1. "When" are accident reports reviewed: (Frequency)

	Safety Person	Immediate Supervisor	Manager	Vice President	President	Other
As Occurring:					,	
Weekly:						
Monthly:						
Quarterly:						
Yearly:						

2. "WHO" is responsible for accident reviews, investigations and corrective actions?

	Safety Person	Immediate Supervisor	Manager	Vice President	President	Other
Review:						
Investigation:						
Corrective Action:						

3.						participate in employe Quarterly		
4.						ns Safety Inspections o		
5.	"WHAT	Γ" perce	ent of on-	site sa	fety inspec	tions do your Field Sup	ervisors participa	te in?
	0	25	50	75	100			
			<u> </u>					
6.						ccident cost charged ag ir Corporate budget		
7.	a) Cop b) Rev	pies Rec viewed	eived? \ with you	/es r perso	No nnel prior t	npany's "Contractor Saf to Company work? Yes e to Company supervise	No	

PART "C": Your Safety Program

			Yes	No
Do yo	ou have a written Safety Po	licy signed by Management?		
	ou provide Safety Orient ing for Company?	tation to new Employees prior to		
DO y	ou provide your employees	with Safety Training?		
Indic	ate if your employees are tr	rained in the following?	Yes	No
Haza	rd Communication OSHA S	tandard		
Lock	, Tag Out, OSHA Standard			
Elect	trical Hazards			
∩ #~L	nore Employee Orientation			
		nal protection equipment do yo	ou furni	sh to you
1.	What type of person	Company USA Inc. may request records to verify information report. Also, Company ma	st to rev contai y cond	riew your ned in th
1. 	What type of person employees? Audit Agreement:	Company USA Inc. may request records to verify information report. Also, Company may reviews of your work operation	st to rev contai y cond ns.	riew your ned in th
1.	What type of person employees? Audit Agreement: Approval Granted: Na	Company USA Inc. may request records to verify information report. Also, Company mareviews of your work operation	st to rev contai y cond ns.	riew your ned in th uct on-sit



1999 SEMP Performance Measures and Best Practices Workshop

Personnel Safety Performance

Mobil

October 27th and 29th, 1999

1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

Agenda

- Company Profile
- Personnel Safety Activities
- Closing

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

Company Profile

- Number of Platforms (122)
 - 51 Major 71 Minor
- Mixture of New and Old Platforms
- Production (Gross Operated)
 - 486 MMSCFD
 - 37,100 BOPD
- Permanent Employees 680
- Offshore Contract Positions 34

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Management Strategies
 - Environmental, Health and Safety Management Systems (EHSMS).
 - List of Expectations.
 - Expectations are assigned to accountable
 - Annual assessments conducted to identify gaps and Best Practices.
 - Improvement plans developed to address gaps
 - Best Practices shared with organization.
 - Leadership recognizes the correlation between excellent EHS performance and strong business results.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Strong Company Commitment to SEMP.
 - Started Implementation in 1994.
 - 16 employees assigned to implementation team.
 - Developed electronic SEMP process which includes:
 - Management of Change (MOC) Process.
 - Online Platform Drawings.
 - Operating & Maintenance procedures.
 - Training program.
 - Links to other databases.

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1999 SEMP Performances Measures and Best Practices Workshop Personnel Safety Performance Mobility SEMP SEM

1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Developed an EHS Incident Database.
- Database is utilized to:
 - Perform trend analysis of incidents.
 - Develop action plans for continuous improvement.
 - Develop a monthly EHS Scorecard.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Improved Near Miss reporting.
- Identified barriers for reporting.
- Developed educational system for employees.
- Management is a strong driver for Near Miss reporting.
- Near Miss reporting improved from 15 in 96' to over 300 in 98'.
- Near Miss analyses are performed to focus resources.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Detailed Formalized Investigation Process.

- Utilize "TapRoot" process.
- Trained approx. 40 employees on the process.
- Process identifies chain of events and conditions leading to the incident.
- Process then identifies "Causal Factors" and "Root Causes" of the incident.
- Corrective Actions are developed based on "Root Causes" and tracked electronically to closure.
- Lessons learned from the investigations are shared electronically with other Business Units via Mobil's "BestNet Incident Reporting System."

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Developed "Closure Tracking Database"

- Database is utilized to track various items to closure.
- Database is Lotus Notes based and utilizes email system to notify responsible person.
- Database sends out automatic reminders.
- Database notifies supervisor if the specified action is not completed.
- Database notifies Action Initiator that item is complete and needs reviewed and closed out.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

- Improved Contractor Safety Program.
 - Contractor Pre-selection process models API RP 2221 Implementing a Contractor Safety and Health Program.
 - Specific training requirements based on job titles.
 - Pre-job meetings to review EHS requirements.
 - Detailed Safety Orientation.
 - Morning meetings to discuss work activities.
 - Permit to Work system for non-routine jobs.
 - Contractor Field Safety Evaluations.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

Closing

- Goal is Top Quartile EHS Performance in industry.
- Utilize Environmental, Health and Safety Management System (EHSMS) to achieve Top Quartile EHS Performance.

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1999 SEMP Performances Measures and Best Practices Workshop

Personnel Safety Performance

Closing

Any Questions?

Joe Sawyer

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504-566-5477 - Office Fax

 $Joe_T_Sawyer@email.mobil.com$

Mobil

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	Bloodborne Pathogens	First Aid *	HazCom	Energy Control	Electrical Safety	Confined Space Entry	Fall Protection	Proper PPE usage	Hearing Conservation	Incipient Fire Fighting	Crane Operations	Facility Safety Orientation	HazVVoper (Level 1-4) **	Hot Work	Water Awareness/Survival***	Rigging (Hoist, Sling, & Chain Safety)	Respiratory Protection	H2S (Mobile Bay Operations)	PSM/SEMP Overview	Industrial Power Trucks	Spill Prevention Countermeasures & Control	D O T Hazmat Employee HM-126F	Well Control (30 CFR Subpart O)	NPDES	Excavation Safety	Scaffold Safety
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Visitor/Foreign Resident					\perp							X		\Box	(H)	L	1	(E)	ļ.,	-	\perp	<u> </u>	-	+	\perp
* = Minimum 1 person trained per crew	L.,			1			ــــــــــــــــــــــــــــــــــــــ		. [<u> </u>	<u> </u>	بط	<u>Ļ.</u>	ا	<u></u>			 				-+	- <u>i</u>		
** = 1-First Responder Awareness Level, 2-First Responder Opera	tions	Leve	el, 3	-Haza	ardou	s Ma	iteria	Is Te	chnic	cian,	4-Ha	azard	ous !	viate	rials	Spec	anst	-		-		-				
*** = Water Awareness training does not include escape from helico	pter	ļ		+	-i		.	-			-	-		+				-				+	-	.		
**** = Includes Snubbing & Coil Tubing Operations	+-	1	+			÷			 -	-į		+-	-	-		ļ	-	+-			+		+			1
"D" = Depends if work requires this type of training.			+				÷	_	+	1				+		+-	+	-		-	+-	+-	·			
"X" = Mandatory requirement.			+			+		-					j	+	- 	-			-	+			-1-	-		† "
		. 1					- +				+				-i	- 	1	-+			1-	\rightarrow				ľ
"P" = Indicates Initial training	nroce	2550	S		í	1						ì				:					1	- 1	- 1	_	_i_	. L
"R" = Indicates Refresher training based upon changes in chemicals	proce	esse	S.	+	╁		+		+			╁		-	+-	i	-				+-			-		1
"I" = Indicates Initial training "R" = Indicates Refresher training based upon changes in chemicals "A" = Indicates Annual/refresher training (H) = Review provided by Pilot/Boat Capt.	proce	esse	S.		-		+	+	-	-	+														-	1

1999 SEMP Performance Measures and Best Practices Workshop



Operational Quality Though Continual Safety Improvement



Operational Quality Though Continual Safety Improvement

Agenda

- Introduction
- Management of Safety
 Fundamental Elements
- Communication
- Operational Quality
- Summary

Profile

- Established in 1980
- 600 Personnel Operating
 - 110 Manned Major Facilities
 - 50 Unmanned Major Facilities
 - 78 Minor Facilities
- Services Offered
 - Production Management
 - Contract Personnel (Operators, Mechanics, I&E Technicians, Drilling & Production Clerks and Shorebase Dispatchers)
 - Medic Systems (EMT-Paramedic)
 - Transportation Services
 - Engineering Services



Management of Safety Fundamental Elements

- Identification of our Goals& Objectives
- Self Assessment and Audits
- Performance Based Behavioral Safety
- Measurements and Process Indicators
- Accountability and Performance Based Objectives



Identification of our Goals & Objectives

- Specific Job Qualifications and Skills
- Specific Training (i.e. H₂S)
- Review Facility Inspections, available Hazards Analysis, any Compliance Audits and Incident Reviews
- Customer Feedback Provides
 Contract Specific Expectations



Self Assessment and Audits

A continual, ongoing process to identify systems needing improvement using;

- SEMP Program
- Policy / Procedural Reviews
- Regulatory Review
- Training Curriculum Meets
 Contract / Employee Needs
- Communication / Reporting Systems
- Inspection Data



Performance Based Behavioral Safety

- Observation Reports
- Safety and Training Bonus
- Recognition and No INC Awards
- Safety Policies / Procedures
- Employee Training

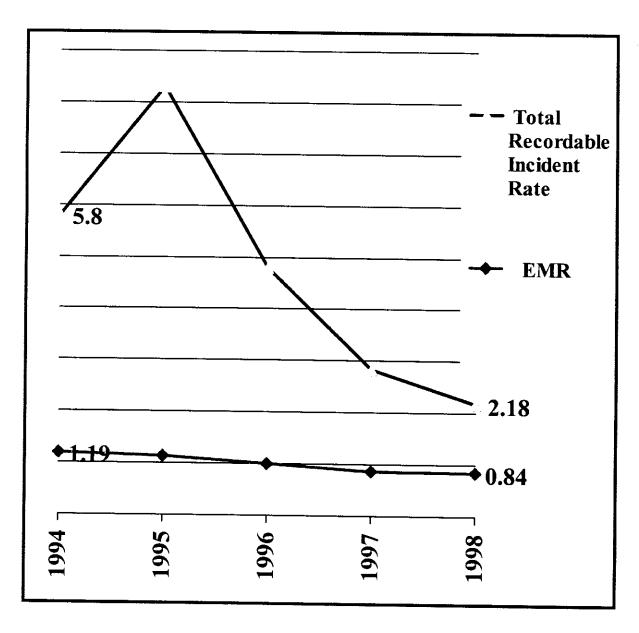


Measurements and Process Indicators

- Experience Modifiers
- Near Miss Reports
- First Aid / Incident Reports
- Observation Reports
- Incident Trend Analysis
- OSHA Recordables
- Incident / Severity Rates
- Regulatory Interactions

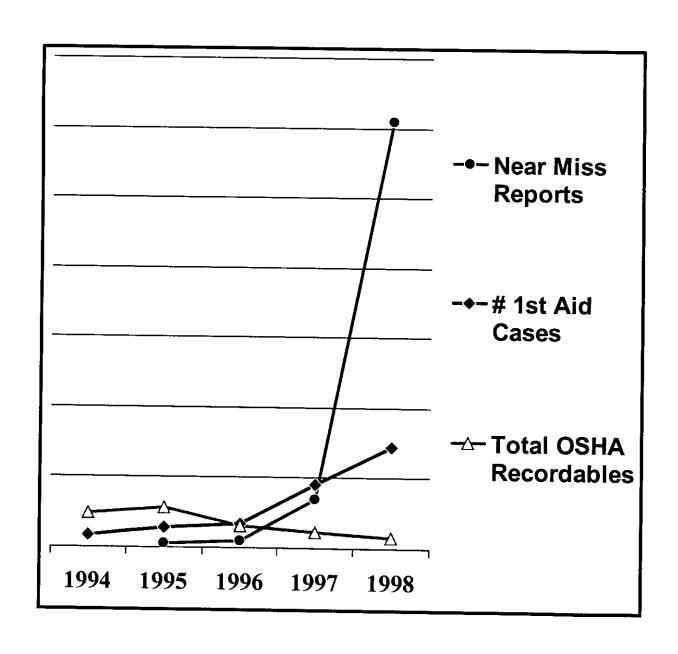


Grasso Production Management Safety Statistics



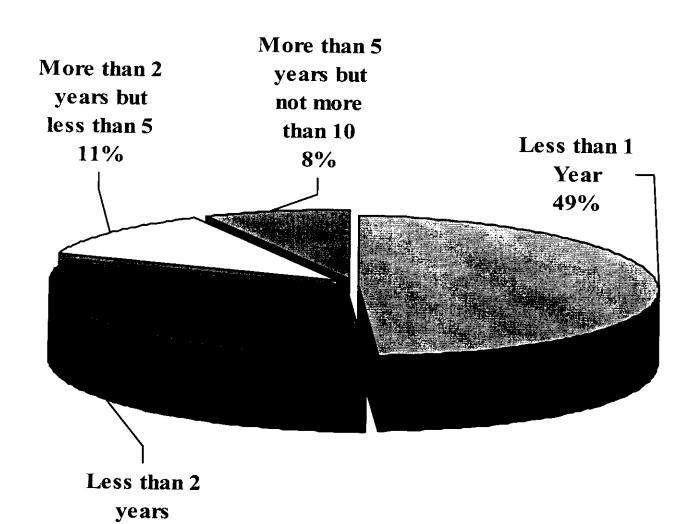
Total Recordable Incident Rate is calculated using the formula outlined by the Bureau of Labor Statistics including all incidents defined as "Recordable" in 29 CFR 1904 as well as those incidents that occur in Federal Waters.

OSHA Recordables, First Aid Injuries and Near Miss Reports



)	

Tenure of Individuals Involved in Incidents

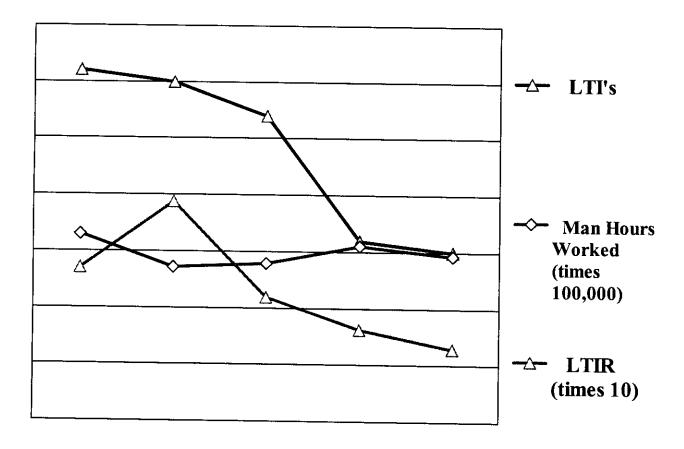




32%

	•	

GPM's Lost Time Incident Severity Rate (LTIR) vs. Lost Time Incidents (LTI) Related to the Total Man Hours Work

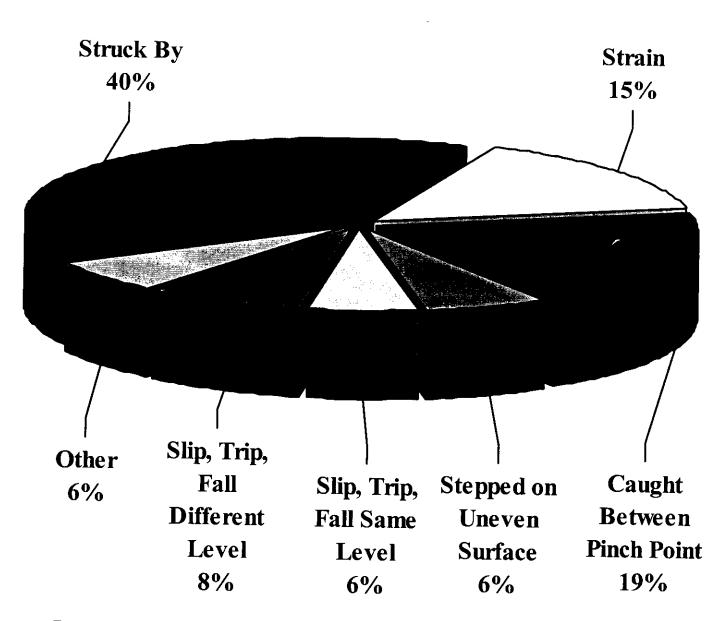


1994 1995 1996 1997 1998

LTI = Number of OSHA Recordables with Lost Work Days and / or Restricted Duty

LTIR = Total number of days lost * 200,000 / Total Man-hours Worked

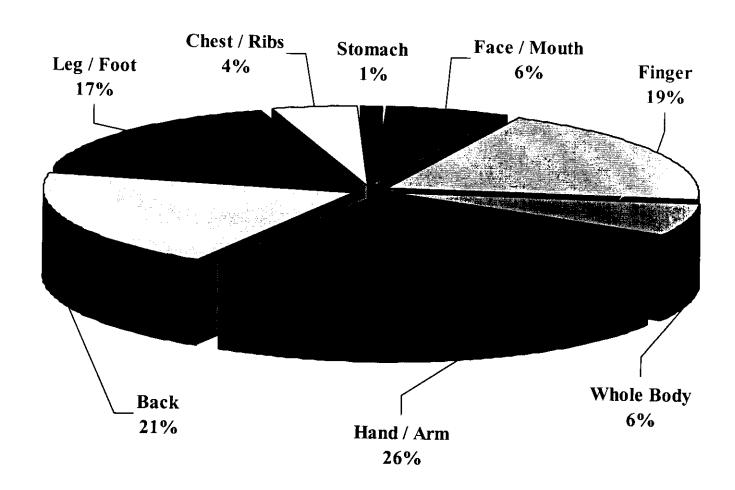
Types of Incidents





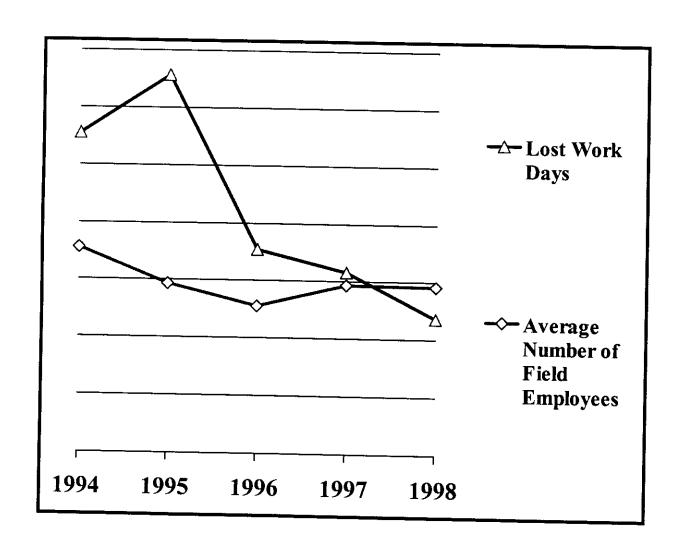
,	-	

Body Part Affected





Lost Work Days Vs. Workforce



•		

Accountability and Performance Based Objectives

- Performance Reviews
- Performance Bonus
- Safety & Training Bonus
- Merit Increase
- Field Supervisor Accountability
- Crew Accountability
- Management Accountability



Operational Quality Though Continual Safety Improvement

Communication

- New Employee Orientation
- Scheduled Training
- Workforce Mailouts
- Safety Alert Memos
- Fields Supervisor / Lead
 Operators Schools
- Crew Changes



TRAINING	-	<u> </u>		
	FREQUENCY	I	II	III
T-1 New Hire Orientation – Awareness Level				1
resident investigation	I	x] x	x
Back Injury Prevention	ļ I	x	x	х
• Control of Hazardous Energy (Lock Out/Tag Out)	I	х	x	х
• Environmental Awareness	ļ	х	х	x
• Electrical Safety Awareness	1 1	x	х	х
• Fall Prevention/Protection	ļ <u></u>	х	х	х
• Fire Prevention/Protection Awareness	1 1	X	х	х
Hazard Communication	1 ;	X	x	х
Orientation & Safety for Offshore Industry	1 ;	X	Х	X
Offshore Personnel Transfers	l i	X	X	x
Personal Protective Equipment (PPE)	Î	X	X	х
SEMP Awareness	l i	x x	X	X
Transportation Safety		^	Х	х
T-2 Production Safety Systems Basic	3	х	x	
Basic Safety Training Program (BSTP) – Awareness Level		- A		<u> </u>
Abrasive Blasting			1	
Accident Investigation	2	x	x	
 Asbestos Awareness 	2	x	x	x x
Benzene / Carcinogens Awareness	2	x	x	x
Bloodborne Pathogens	2	х	x	x i
 Confined Space Entry – Awareness Level 	2	х	x	x
 Control of Hazardous Energy (Lock Out/Tag Out) 	2	х	x	x ,
Electrical Safety – Awareness Level	2	х	x	x
Environmental Awareness	2	x	х	1 ×
Fall Prevention/Protection	2	x	x	x .
Fire Prevention/Protection	2	x	x	x
Hazard Communication	2	х	x	x
Hearing Conservation	2	x	x	x
Hydrogen Sulfide (H2S) Awareness	2	Х	X	x
NORM (Naturally Occurring Radioactive Material)	2 2	х	x	х
Personal Protective Equipment	2 2	Х	x	х
Respiratory Protection	$\frac{2}{2}$	Х	×	х
Water Survival – Awareness Level	2	X	X	х
Work Permits	2	X	X	х
	1	х	X	х
Crane Operator/Rigging	2	х	 	
CPR / 1st Aid	2		X	X
DOT / Hazardous Materials Transportation	2	x x	X	X
Job Site / Specific Training		^	x	X
Emergency Drills	l M		, ,	
 Emergency Evacuation Plan 	M	x x	X	X
Emergency Response Plan	M	x	x x	X
Forklift Safety	2	^ [^]	X
Field Supervisor/Lead Operator School				Х
 Safety Regulations/Policies 	A			
 Human Resources Regulations/Policies 	AA	X	ſ	ŀ
Barriorio Y Official	^	х		

FIELD EMPLOYEE JOB GROUPS

<u>I</u> Superintendent Lead Operator Foreman

Operator
Lease Operator
Roustabout
Production Clerk
Technician

Base Clerk
Dispatcher
Warehouseman
Drilling Clerk

Training Frequency Symbols

	- reducited Symbols	
I = Initial	2 = Every 2 years	M = Monthly
	- Livery 2 years	M = Monthly
A = Annual	3 - Cyany 2	•
	3 = Every 3 years	F



Operational Quality

- Job Qualifications
- Platform / Facility Start-up Inspections and Audits
- Pre and Post MMS Inspections
- SEMP Audits
- Zero Tolerance for Operating in By-Pass



Operational Quality

- Training Criteria
- Employee Accountability
- Field Supervisor and Lead
 Operator School
- Monitor all INC's



Closing

GPM's "Key Elements" in developing

Operational Quality Through Continual Safety Improvement is a process of incremental change which provides:

- The Management of Safety Elements
 - > Identification of our Goals and Objectives
 - > Self Assessment and Audits
 - > Performance Based Behavioral Safety
 - > Measurements and Process Indicators
 - Accountability and Performance Based Objectives
- Communication and Training Formats
- Operational Quality Standards





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810 Hwy. 6 South, Suite 200 Houston, Texas 77079

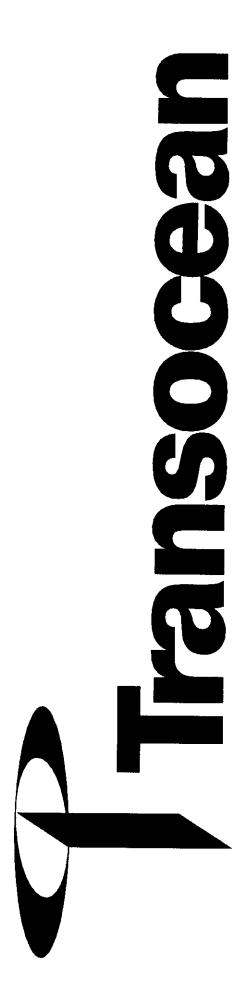
Office: (281) 597-0244

Fax: (281) 597-0243

E-mail: choiseth@gpmi.com

1999 SEMP Performance Measures and Best Practices Workshop

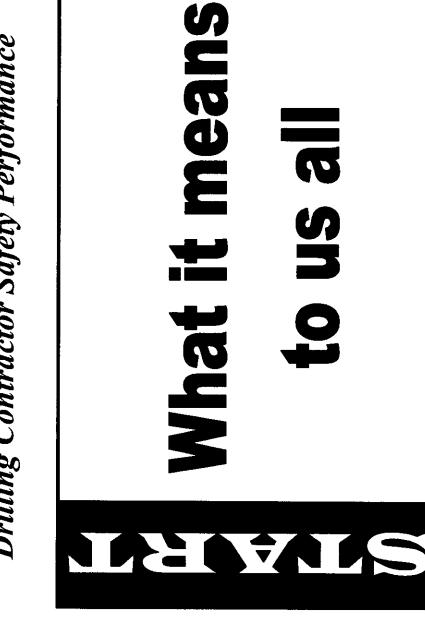
Drilling Contractor Safety Performance



New Orleans / Houston October 1999



Drilling Contractor Safety Performance



- 20 Semi-Submersible
- 4 Drillships
- 6 Jackups
- 3 Dual Activity Drillships

(Countries include UK, Norway, Denmark, Spain, India, Emirates, Holland, Brazil, US, Egypt, Trinidad)

Employees: 3,800

Transocean



1999 SEMP Performance Measures and Best Practices Workshop need the following elements. Management System will A functioning Safety Drilling Contractor Safety Performance Management Commitment Line Accountability System

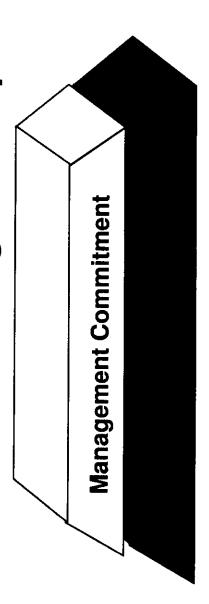


ACCOUNTABLE START

Drilling Contractor Safety Performance

CORE VALUES:

- The heart and soul of a company
- **Guiding Principles**
- Will never be changed / compromised





F inancial Discipline

Integrity & Honesty

R espect

O afety

C echnical leadership



START TO BE ACCOUNTABLE

ETART TO BE ACCOUNTABLE

Drilling Contractor Safety Performance

1999 SEMP Performance Measures and Best Practices Workshop



Transocean

The same of the sa

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(S.) We

Up until 1996 we had a Safety Management System performance yet we were not experiencing further that had taken us to a reasonable level of safety improvement.

fulfilling our needs and thus START was born. revealed that a safety observation program was not Brainstorming sessions with operations personnel



START
TO BE
ACCOUNTABLE



Think





Track

START to be Accountable

Process

Observations card

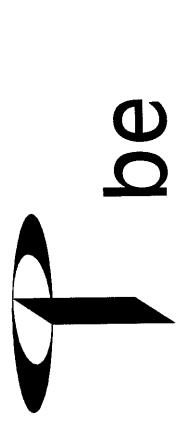
Feedback

Tracking Program

STARTerKit

START to Understand Each Other





Accountable

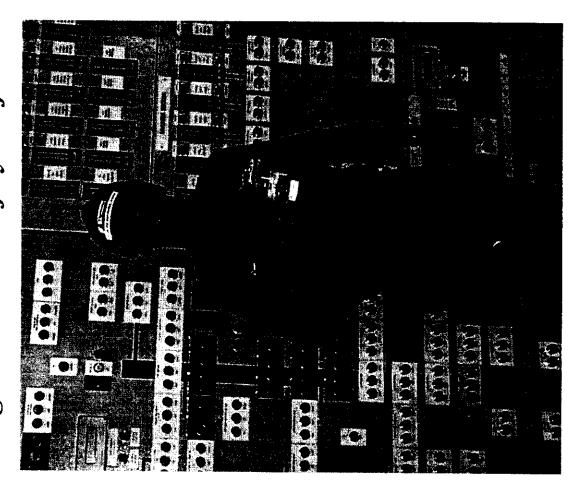
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ETTART TO BE ACCOUNTABLE

ETART TO BE ACCOUNTABLE

Drilling Contractor Safety Performance

1999 SEMP Performance Measures and Best Practices Workshop





Transocean Buy In

Management Support

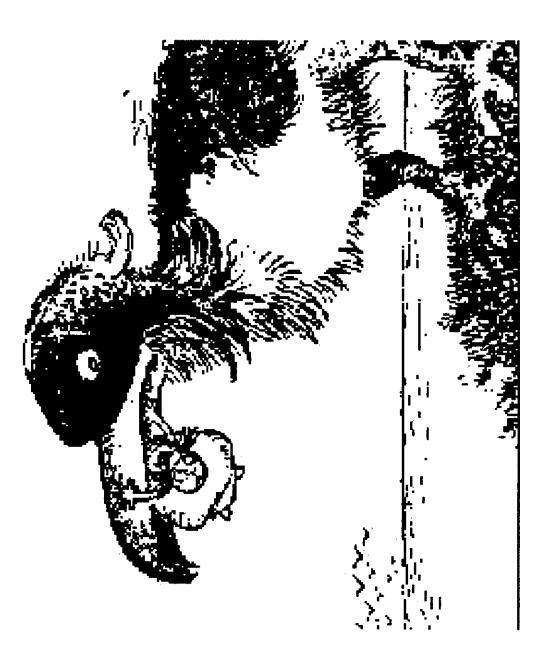
Operators Support

Legislators Support

Behavioral Experts Recognition



Drilling Contractor Safety Performance



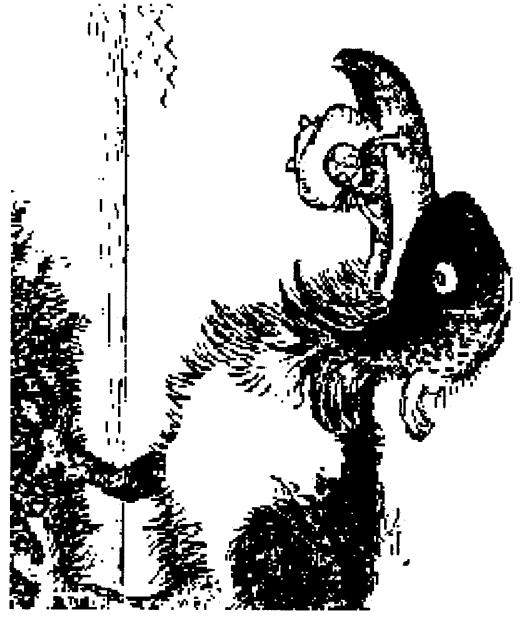


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Drilling Contractor Safety Performance

1999 SEMP Performance Measures and Best Practices Workshop

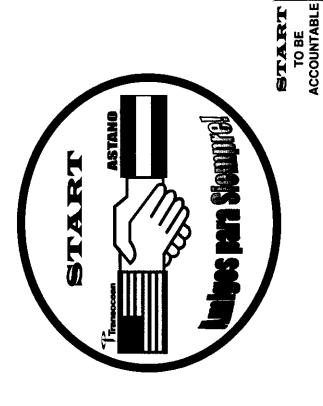


Transocean

Drilling Contractor Safety Performance

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With A Signed
Travel Request

NO TO

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Drilling Contractor Safety Performance

Teamwork on the Comet

MED MED DEG SELV

A SER Positivo TRANSOCEAN LEGEND

T Transocean

A Your Safety needs You

Transocean leader

ESTART TO BE ACCOUNTABLE

Transocean



Transocean Enterprise



We would like to thank you for your involvement in the projects being undertaken on the philosophy that team work, open communication, and constant improvement will move Transocean Enterprise. Successful implementation of the operations being performed Together, BP Amoco and Transocean are committed to the safety and welfare of our employees and the employees of all involved in our operations. We believe in the and the technology being utilized are critical to the future of both our companies. us forward in safety and operating excellence.

development and improvement by the people who gain the most from a safety process The STATE Process is recognized as a proactive observation system which focuses on human behavior using positive feedback. It is in a constant state of the people on the rig.

We have a vision of where START will take BP Amoco, Transocean, and the people associated with our operations now and in the future. You have our full support for the successful implementation of START and for achieving 100% Safety Management System compliance on the Enterprise

John Pantaleo Drilling Manager BP Amoco

Mike Hall Division Manger - Gulf Coast Transocean

Transocean Prospect

on Transocean Prospect. Both Statoil and Transocean are committed to the safety and welfare of our employees and those involved in our operations. We believe in We would like to thank you for your involvement in the project being undertaken the philosophy that constant improvement will move us forward in safety and operating excellence.

The people who gain the most from a safety process recognize the START process as a proactive observation system in a constant state of development and improvement. The people on the rig.

We have a vision of where STATE Will take Statoil, Transocean and the people associated with our operations into the future.

You have our full support to the continued success of START

Mads Grinrød Vice President Drilling & Well Technology Statoil

Kjell Gunnar Bjerke Managing Director Transocean ASA

START

STATOIL - TRANSOCEAN

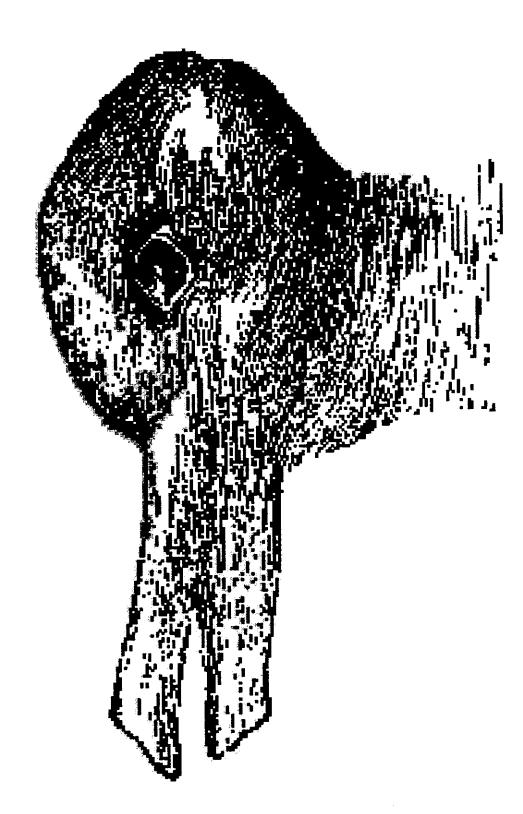
Continued support by management and supervisors as well as workforce.

START Immersions.

Rotation of START champions.



Drilling Contractor Safety Performance

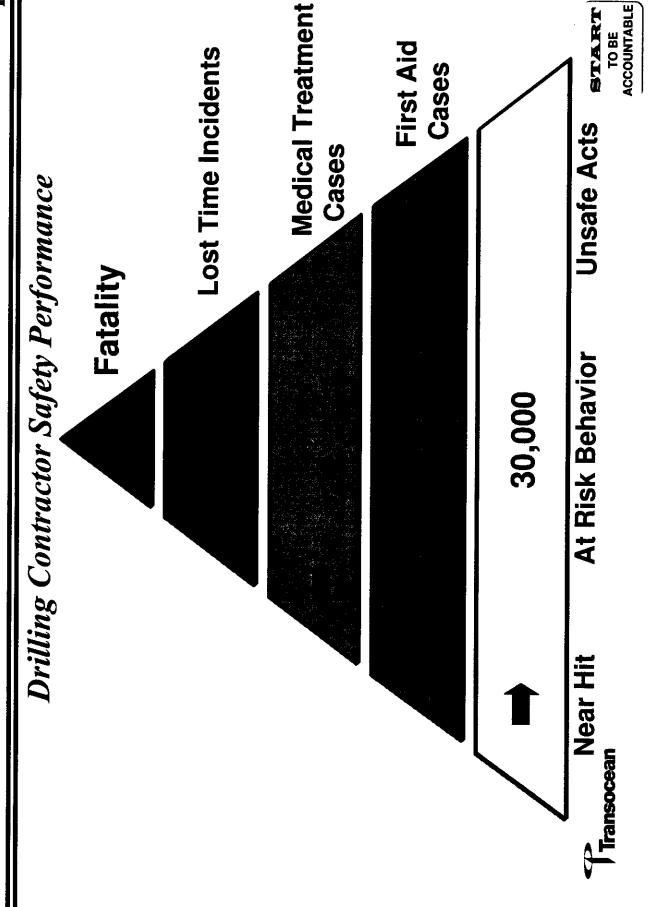




ETART
TO BE
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1999 SEMP Performance Measures and Best Practices Workshop



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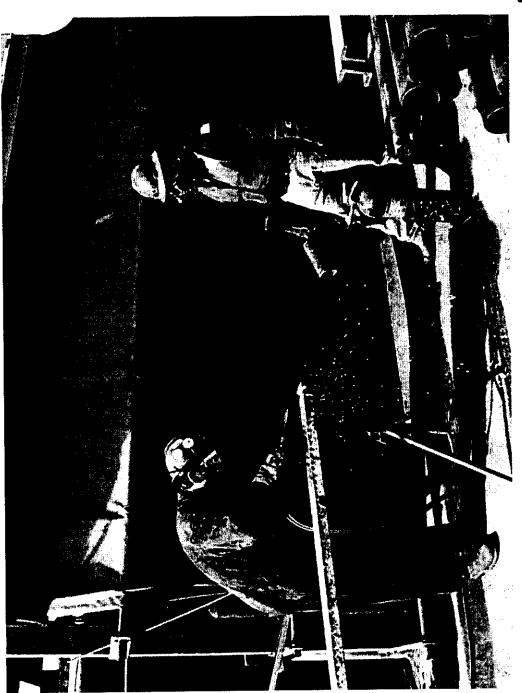
and the continued belief that through a More and more interest in the process START will continue to become observations and positive feedback more consistent approach to part of our culture.



	.*	
-		

TART TO BE ACCOUNTABLE

1999 SEMP Performance Measures and Best Practices Workshop Drilling Contractor Safety Performance



Fransocean

It always was about people and it always will be about people and START is about people.



ESTEATRIF TO BE ACCOUNTABLE

Drilling Contractor Safety Performance

1999 SEMP Performance Measures and Best Practices Workshop





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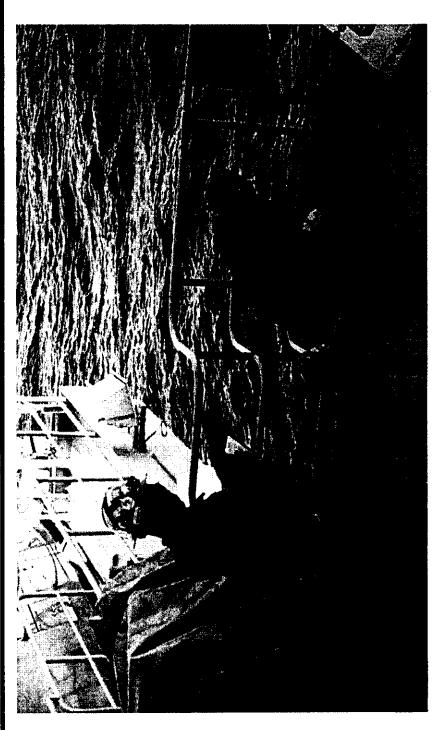
ETTART TO BE ACCOUNTABLE

Drilling Contractor Safety Performance





1999 SEMP Performance Measures and Best Practices Workshop



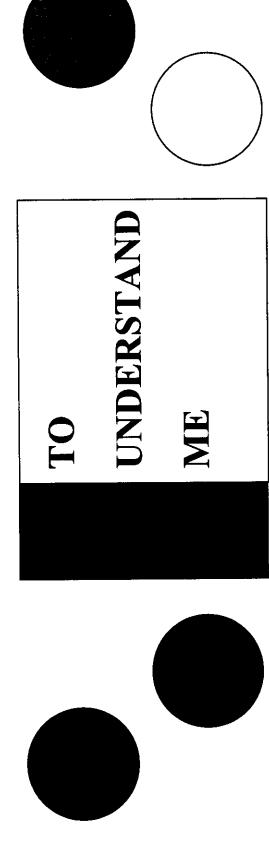
To look is one thing. To see what you look at is another. To understand something else. But to act on what you learn is all that really matters. what you see is another. To learn from what you understand is

Winston Churchill



TO BE ACCOUNTABLE

Drilling Contractor Safety Performance



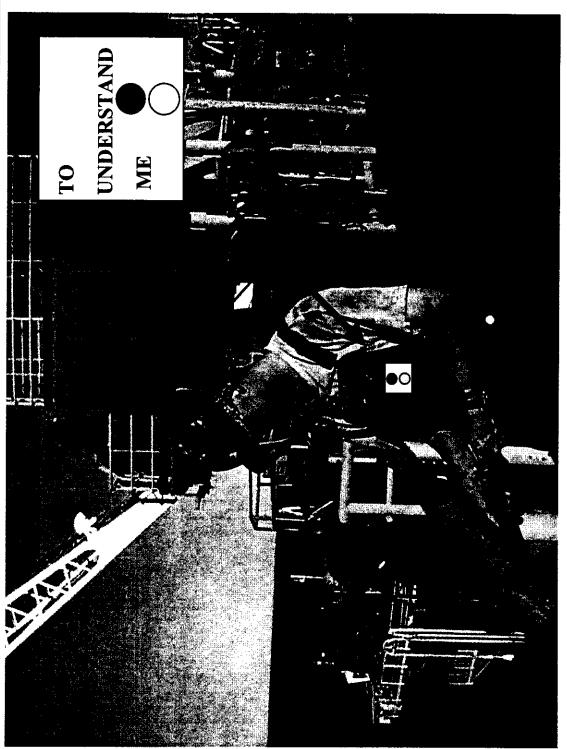
Treat people the way they NEED to be treated

PLATINUM RULE

ä

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TO BE
ACCOUNTABLE

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START TO BE ACCOUNTABLE

Transocean

Basic needs are:

Management buy in and visible support.

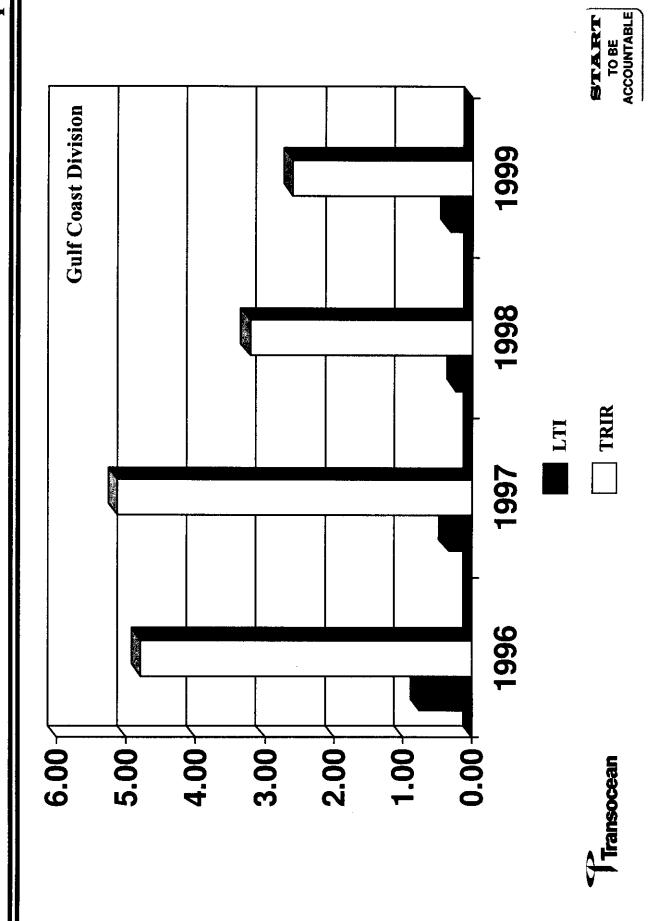
accountability for the process to work. Full understanding of individual

Buy in from all in the workforce as they realize that it will work for them.

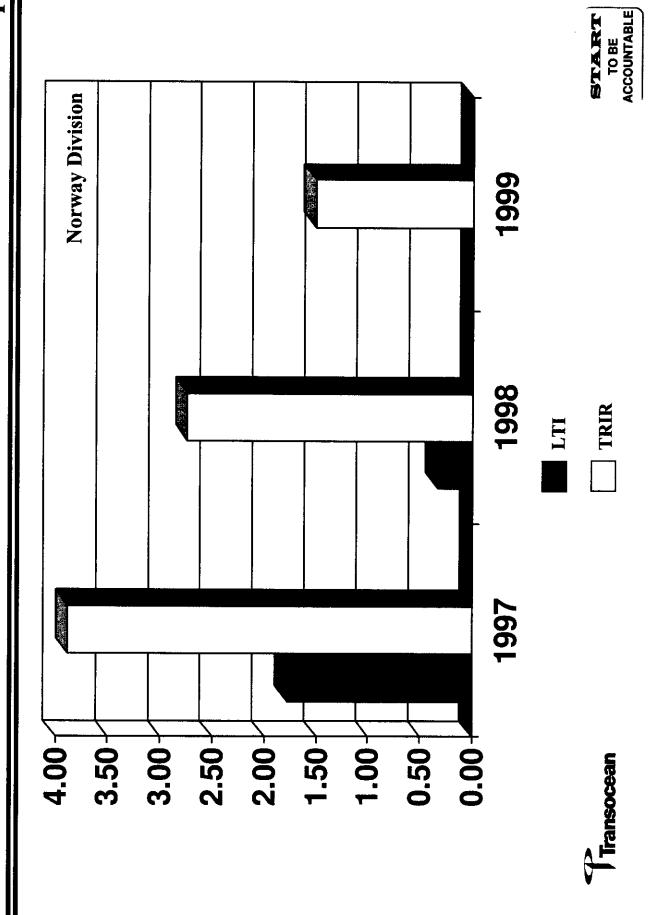


ESTEATET TO BE ACCOUNTABLE

1999 SEMP Performance Measures and Best Practices Workshop



1999 SEMP Performance Measures and Best Practices Workshop



Drilling Contractor Safety Performance

START to ask questions???

Doug Entrekin: 713-232-7932

dentrekin@deepwater.com

713-232-7717 Lewis Senior

lsenior@deepwater.com

713-232-7777 Fax Number

Transocean





1999

SEMP Performance Measures & Best Practices Workshop

Oil Spill and NPDES Pacesetter

Spirit Energy 76 UNOCAL

October 27th and 29th, 1999



Pacesetter Discussion

- > Company Profile
- **>>** Discussion
- ➤ Closing



Company Profile

- ➤ GOM Platforms (249)
 - 120 Major
 - 129 Minor
- Production (Gross)
 - 753 MMCF/D
 - 29,000 BOP/D
- Employees
 - Direct Staff (70)
 - Facility "Spirit" (220)
 - Facility "Contract" (38)
- > Asset's managed in Lafayette, LA.



<u>Management</u>

- > Leadership commitment to OMS
 - Operations Management System
 - Policies, Procedures and Process
 - Aligned to SEMP/PSM initiatives
 - Includes Personal Performance Standards through out Organization
- > Leadership commitment to reporting
 - Field to Agencies (as required)
 - Field to Staff
 - Staff follow-up to Agencies (if required)
 - Staff follow-up to Field
- » Leadership Participation in
 - Monthly meetings
 - Incident reviews
 - Measures of Performance Standards



Management

- Leadership commitment to Support
 - Dedicated H. E. S. & L.C. Staff
 - Centralized Data Collection / Communication
 - Coordinates Activities Company Wide
 - Oversight & Support to Field Functions
- Leadership commitment to Support
 - Dedicated L.C. Field Coordinators
 - Provide Individualized Oversight
 - Reviews all Report Documentation
 - Provides Direct Follow-up or Tracking
 - Shares Critical Information across Groups
 - Frequent Field Presence



Personnel

> Supervisory

- Positions on site
- Leads Daily Pre-work meetings
- Performs Planned Inspections
- Accountable for Action Items
- Makes Required Notifications

> Operators

- Include Company and Contract
- Attends Daily Pre-work meetings
- Attends Monthly Training
- All are T-2 Certified
- Accountable for Action Items
- Participate in Problem Idea Proposal Plan



Programs

- >> Planned General Inspections
 - Formalized Checklists
 - Reporting of Substandard Conditions
 - Requires Action Items
 - Daily Pre use Checklists
- Preventative Maintenance
 - Formalized Documentation
 - Prescriptive and Predictive
 - Performed by Qualified Personnel
- ➤ Management of Change
 - Documented Process
 - High level of Field Involvement
 - HA's, What Ifs & Diagram Confirmations

Programs

- Environmental Compliance
 - Detailed Manual
 - Reporting Requirements
 - Release Size Calculation Formula
 - Response Actions
- ➤ Potential Risk Alerts
 - Standard Form
 - Environmental/Safety/General Risk
 - Used by Anyone Anytime
 - Reviewed and Confirmed
 - Supervisors Foremen Superintendents & Loss Control Field Coordinators



Programs

- ➤ Stop and Think
 - Basic Questions Constant Application
 - → Are you following your original work plan?
 - → Are you following Spirit Energy 76 Work Practices?
 - →Do <u>ALL</u> personnel understand the procedures and tools utilized in the work plan?
 - → Have you considered unexpected conditions in your work plan? (e.g. Weather, slippery floors, pinch points, overhead hazards)
 - → Have new / transferred personnel been trained to adequately perform the work task? ... Or they new contractors?
 - → Have you considered the effects of your work plan on the operations around you?



General

- > Updated Monitoring Systems
 - Pressures
 - Temperatures
 - Volumes

➤ Testing

- Trained in Process
- Meet or Exceed Regulatory Frequencies
- Personnel Assigned to Specific Equipment
- Testing Equipment Maintained in Field

➤ Vessels

- Any Equipment Storing Significant Volumes of Hydrocarbon Liquids utilize Solid Containment Skids w/ closed loop drain systems
- Inspected and cleaned regularly



Closing

- Leadership Promotes
 - Zero NPDES Exeedances and Oil Spills
 - Goals rewarded
 - Group Awards & Banquets
 - Individual Awards & Banquets
- > Employee Awareness
 - Training Emphasis on Identifying and Performing "Before It Happens"
- Operations Management System
 - Culture Since 80's
 - Embraces SEMP / PSM
 - Total Management System
 - Continuous Improvement



Closing

- ➤ Questions?
- > Additional Information . . .
- Andy Pettit
 318-295-6228 Office
 318-295-6385 Fax
 Robert.Pettit@unocal.com
- Rick Sisk
 281-287-7755 Office
 281-287-5402 Fax
 Rsisk@ unocal.com

Setting the Pace in Pollution Prevention



October 27th and 29th, 1999

1999 SEMP Workshop Company Profile - GOMR

Company Profile - GOMR

- FIELDS: 14
 - 8 MANNED BY COMPANY PERSONNEL
 - 6 UNMANNED, CONTRACT LOOP OPERATED
- PLATFORMS: 24
 - 16 MAJOR
 - 8 MINOR
- GROSS OPERATED PRODUCTION
 - 61,000 BOPD
 - 348 MMSCFD
- FIELD OPERATIONS STAFF: 70



1999 SEMP Workshop Oil Spill and Poliution Prevention

Oil Spill and Pollution Prevention

- <u>VISIBLE</u> AND <u>ONGOING</u> DEMONSTRATION OF COMMITMENT TO PHILOSOPHY AND POLICY OF SPILL AND POLLUTION PREVENTION BY SENIOR MANAGEMENT
 - CORPORATE POLICY STATEMENT
 - ANNUAL CORPORATE EHS REPORT
 - CORPORATE SEMP AUDITS
 - PROVISION OF PREVENTION RESOURCES
 - QUARTERLY REVIEW OF PERFORMANCE



1999 SEMP Workshop Oil Spill and Pollution Prevention

- MIDDLE MANAGEMENT COMMITTED TO DESIGN AND IMPLEMENTATION OF PREVENTION STRATEGIES
 - SPIRIT OF THE LAW PROACTIVE VS REACTIVE
 - PERIODIC AND CONSISTENT REENFORCEMENT OF PHILOSOPHY AND POLICY TO FIELD STAFF
 - PERIODIC CHECK OF FIELD STAFF CONFORMANCE AND VALIDATION OF "BUY-IN"
 - MONTHLY REVIEW OF COMPLIANCE PERFORMANCE
 - QUARTERLY SELF INSPECTION
 - INDEPENDENT ANNUAL INSPECTION



1999 SEMP Workshop Oil Spill and Pollution Prevention

- MIDDLE MANAGEMENT COMMITTED TO DESIGN AND IMPLEMENTATION OF PREVENTION STRATEGIES (CONT.)
 - PERIODIC AUDIT OF THIRD PARTY SERVICE PROVIDERS
 - FULL INVESTIGATION OF NON-COMPLIANCE
 - VOLUNTARY SHUT-IN OF PLATFORM TO PLACE IN COMPLIANCE
 - ZERO TOLERANCE POLICY FOR WILLFUL VIOLATION OF LAW



1999 SEMP Workshop Oil Spill and Pollution Prevention

- FIELD STAFF COMMITTED TO EXECUTION OF PREVENTION STRATEGIES AND PROCEDURES
 - COMMITMENT TO FULL AND ACCURATE REPORTING
 - ANNUAL MEETING WITH SENIOR FIELD STAFF TO PRESENT AND DISCUSS PREVENTION RECORD
 - FULL FIELD AUTHORITY FOR PREVENTION ACTION INCLUDING COMPLETE SHUT-IN OF PRODUCTION
 - SHOREBASE STAFF FIRST LINE OF DEFENSE FOR POLLUTION PREVENTION ASSOCIATED WITH OUTBOUND EQUIPMENT AND SUPPLIES
 - REFUSAL TO ACCEPT REPEAT FAILURES OF PROCESS SAFETY DEVICES

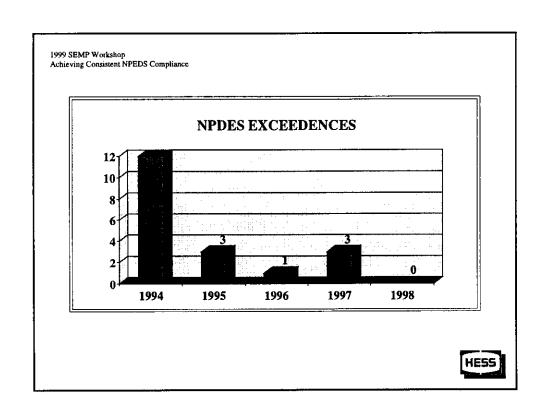


1999 SEMP Workshop Achieving Consistent NPEDS Compliance

Achieving Consistent NPDES Compliance

- APPROPRIATE PROCESS EQUIPMENT
- EFFICIENT CHEMICAL PROGRAM
- TRAINED AND EMPOWERED FIELD STAFF
- TIMELY AND FREQUENT REPORTING
- PRODUCED WATER MONITORING PROGRAM





1999 SEMP Workshop Achieving Consistent NPDES Compliance

- APPROPRIATE PROCESS EQUIPMENT
 - PROPER DESIGN AND CAPACITY
 - GOOD MAINTENANCE
 - PHASE OUT SKIM PILES
 - SEPARATE SUMP SYSTEM FOR DECK DRAINAGE
- EFFICIENT CHEMICAL PROGRAM
 - REDESIGNED CHEMICAL PROGRAM
 - SINGLE SOURCE OF SUPPLY AND SERVICE
 - ONSITE TESTING AND TECHNICAL SUPPORT
 - INDEPENDENT MONITORING
 - PERIODIC PERFORMANCE REPORT
 - PREPARATION FOR NON-STANDARD CONDITIONS



1999 SEMP Workshop Achieving Consistent NPDES Compliance

- TRAINED AND EMPOWERED FIELD STAFF
 - NPDES SAMPLING PROCEDURE
 - PRODUCED WATER MONITORING PROGRAM
 - PROMPT REPORTING OF PROCESS PROBLEMS
 - USE OF ALL AVAILABLE COMPANY RESOURCES
- TIMELY REPORTING AND REPORT ANALYSIS
 - MONTHLY NPDES REPORT
 - PRODUCED WATER MONITORING REPORT
 - PROCESS VESSEL EFFICIENCY ANALYSIS
 - TREND ANALYSIS



1999 SEMP Workshop Achieving Consistent NPDES Compliance

PRODUCED WATER MONITORING PROGRAM

THE SYSTEMATIC ROUTINE EVALUATION OF PRODUCED WATER DISCHARGE FOR THE SPECIFIC PURPOSE OF....

- (1) CONFIRMING COMPLIANCE WITH NPDES LIMITATIONS OR....
- (2) EFFECTING CHANGE TO MAINTAIN COMPLIANCE WITH NPDES DISCHARGE LIMITATIONS



1999 SEMP Workshop Achieving Consistent NPDES Compliance

- MONITORING PROGRAM NORMAL CONDITION
 - DAILY SAMPLING FINAL DISCHARGE POINT
 - WEEKLY SAMPLING PROCESS VESSELS
- MONITORING PROGRAM ABNORMAL CONDITION
 - NOTIFY FOREMAN
 - REVIEW PROCESS OPERATING CONDITIONS
 - VERIFY CHEMICAL INJECTION RATES
 - INITIATE PROCESS VESSEL SAMPLING AS REQUIRED
 - 2 HOUR SAMPLING FINAL DISCHARGE POINT
 - >24 HOURS SYSTEMATIC SHUT-IN OF WELLS
 - >24 HOURS 1 HOUR SAMPLING FINAL DICHARGE POINT



1999 SEMP Workshop Summary

Summary - Key Elements of Spill and Pollution Prevention

- COMMITMENT OF STAFF AT ALL LEVELS TO PREVENTION AS INTEGRAL PART OF OPERATIONS
- COMMITMENT OF RESOURCES TO ACHIEVE PREVENTION
- PROACTIVE FOCUS ON SPIRIT OF THE LAW
- FIELD STAFF TRAINING, EMPOWERMENT AND "BUY-IN"
- DISCIPLINED USE OF FORMAL PRODUCED WATER MONITORING PROGRAM



1999 SEMP Performance Measures and Best Practices Workshop

Setting the Pace in Pollution Prevention



Bill Anderson

Telephone: (713) 609 5550 Fax: (713) 609 5670

E-mail: wanderson@hess.com

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Pre-Inspection Activities

Notification

Inspection Type

Facility Activities

Personnel

Transportation

INC. Review

Pre-Inspection

House Keeping

Maintenance

Paperwork

Notification

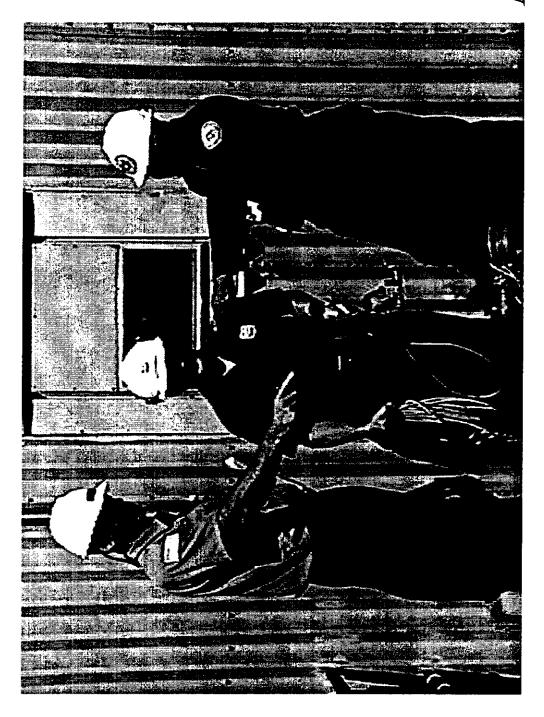


Inspection Type

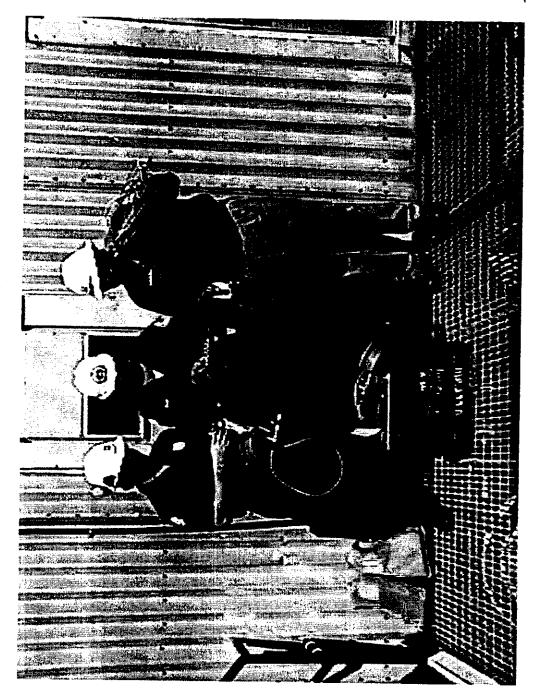
Facility Activities



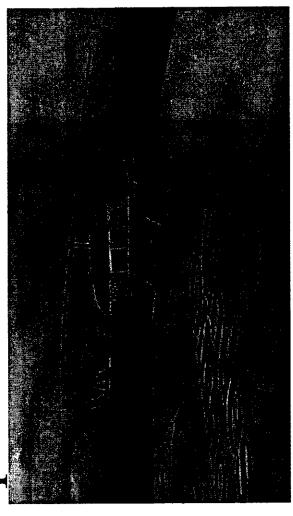
Personnel

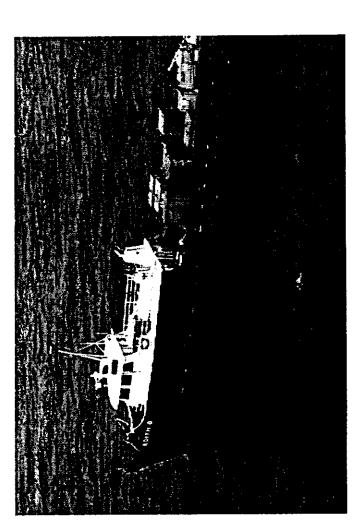


Personnel (Cont..)

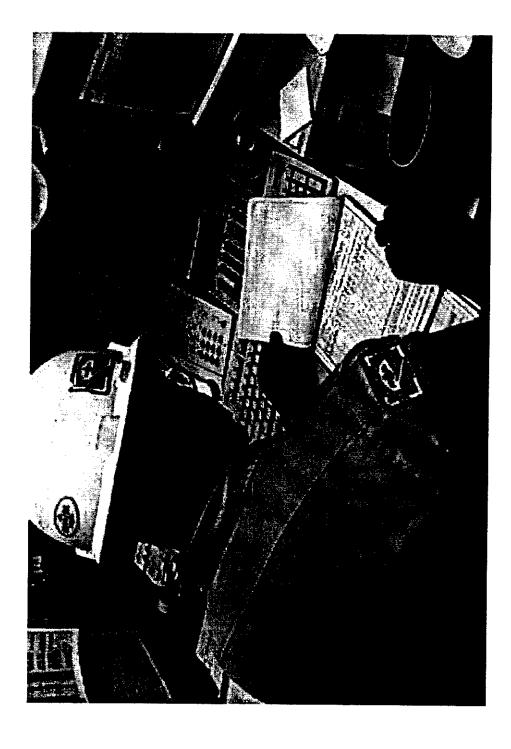


Transportation



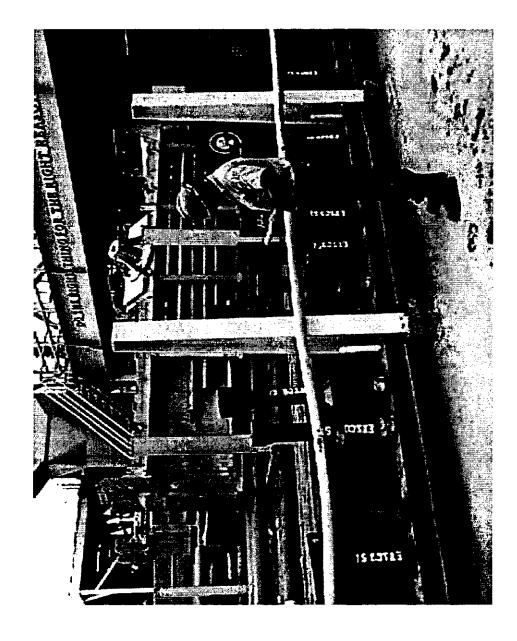


Review of Previous INC.'s

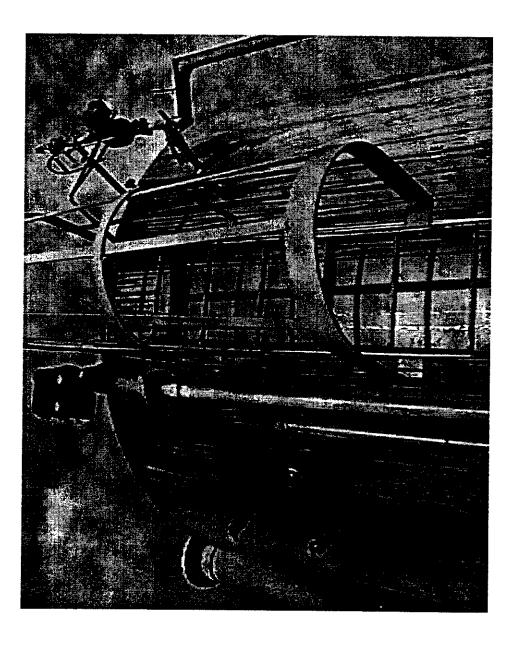


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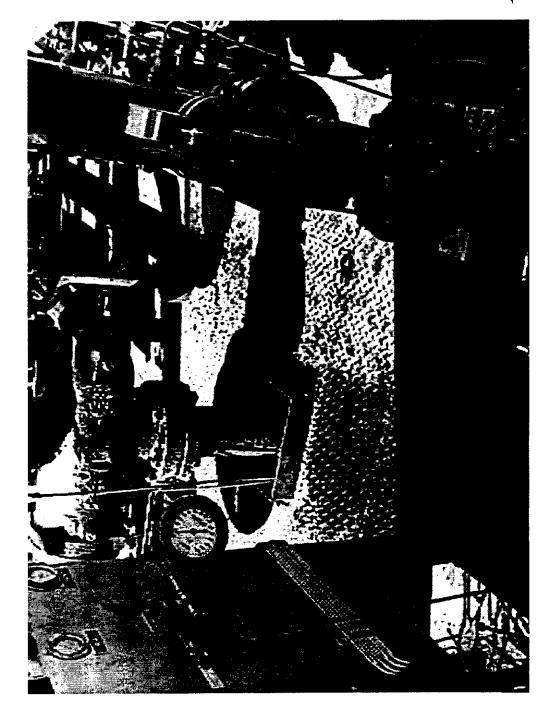
Pre-Inspection



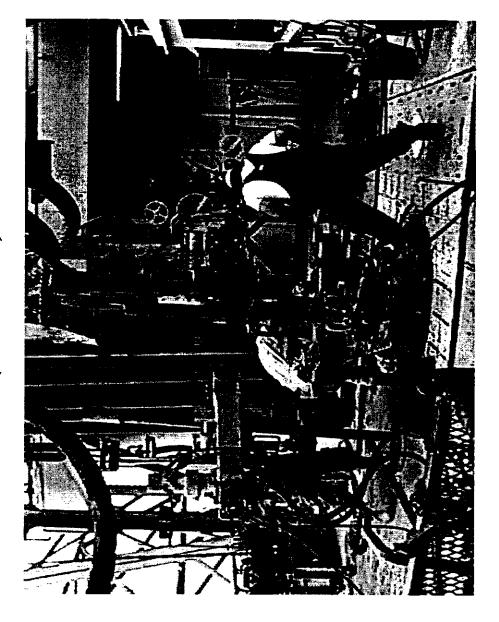
House Keeping



House Keeping (Cont..)



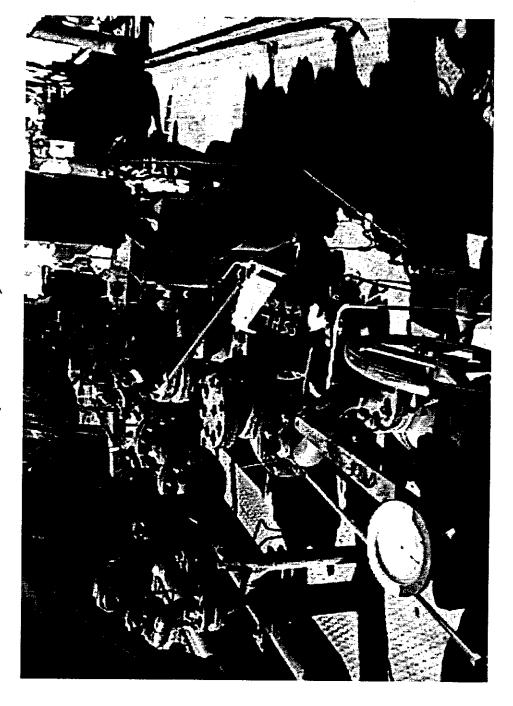
House Keeping (Cont.)

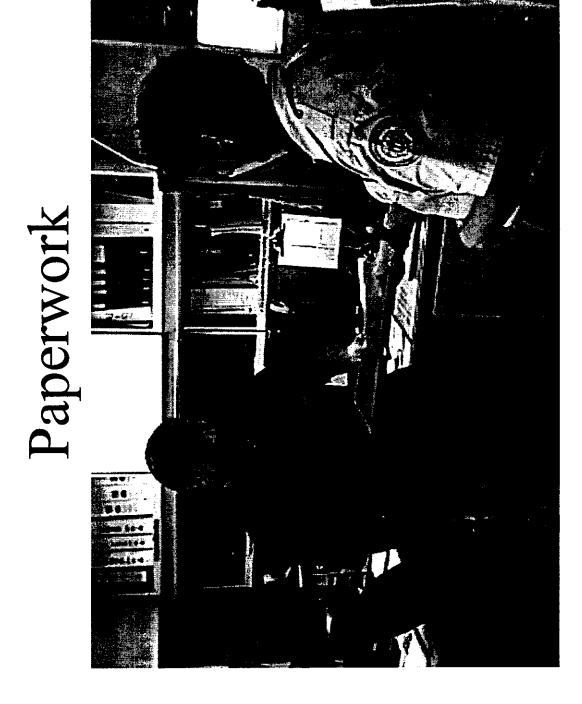


Maintenance



Maintenance (Cont.)

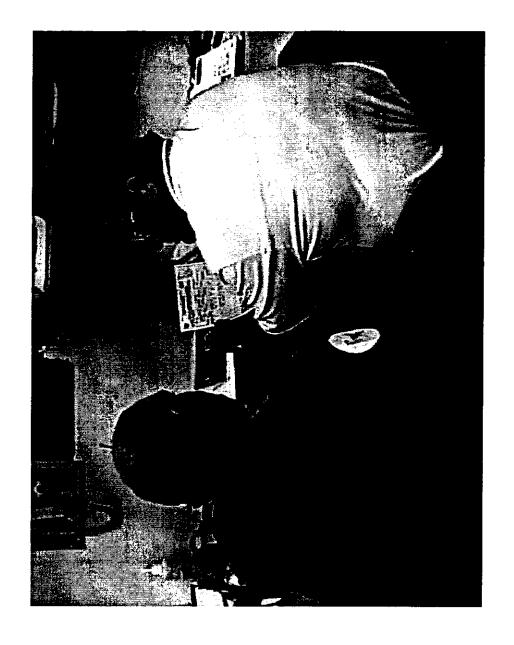




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INC.'s?



Thank You

Inspection Types

- Primary Inspections
- Secondary Inspections

Primary Inspections

- Sampling
- Production Complete
- Production Partial
- Drilling
- Workover
- Pipeline
- Accident Investigation
- Onshore Meter

Secondary Inspections

(Always conducted in conjunction with a primary inspection)

Environmental

• Flaring

H2S

Abandonment

Completion

Wireline

Top Five Production INC.'s

- G-110 Safe and workmanlike operations
- P- 406 Operable FSV installed in final flowline segment
- above the master valve in the vertical run P- 412 Operable SSV or USV located

Top Five Production INC.'s (Cont..)

- G-116 Operations conducted in accordance with approved plans
- P-240 ESD activation initiate shut down of wells or other process components

Top Five Rig Activity INC.'s

- G-110 Safe and workmanlike operations
- D-250 BOP components successfully tested to a low pressure of 200 psi to 300 psi prior to conducting high pressure tests
- accordance with API RP 500B and API RP G-231 Electrical installations made in 14F

Top Five Rig Activity INC.'s Cont.

- G-251 Skid mounted equipment, portable containers, spool or drums, and drums clearly marked with owner's name
- E-102 Facility equipped curbs, gutters, and drip pans to collect all contaminants not authorized for discharge

New PINC.'S: G-111 & G-112

- G-110 Two additional PINC's were added to the G-110 category to address specific issues:
- G-111 Does lessee maintain equipment in a safe condition to provide for the protection of the lease and associated facilities

New PINC.'S: G-111 & G-112 (Cont.)

necessary precautions to correct and remove any hazardous oil and gas accumulations or G-112 Does the lessee provide for the other health, safety, or fire hazards. safety of all personnel and take all

INC.'s Referred for Civil **Penalties**

- P-103 Bypassing of surface and subsurface safety devices
- G-110 Safe and workmanlike operations
- P-283 Tubing plug checked every 6 months for leakage
- P-280 SCSSV checked every 6 months for leakage

INC.s Referred for Civil Penalties (Cont.)

 P-313 Each PSV tested for operation every 12 months

INC. Appeal Process

Informal resolution

Formal appeal

Uses of INC. Data

- Compliance history dictates inspection frequency
- Performance measures
- Annual performance review topic
- Suspension of operations or debarment criteria
- SAFE Award criteria

Uses of INC. Data (CONT.)

- Useful information for potential buyers
- Public information

Inspection Consistency Efforts

- Teams established to develop/insure inspection consistency
- Follow-up inspections performed by district and regional personnel
- Ongoing monthly meetings and teleconferences
- Input from industry

Is there an INC. Quota??

Absolutely Not!!

For Additional Information and Statistics Visit Our Website

www.gomr.mms.gov

Thank You